

Transportation Safety Board of Canada

2009-2010

Report on Plans and Priorities

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Canada

Table of Contents

| | |
|--|-----------|
| Chair's Message..... | 1 |
| Section 1: Overview..... | 3 |
| 1.1 Summary Information..... | 3 |
| Raison d'être and Responsibilities..... | 3 |
| Strategic Outcome and Program Activity Architecture..... | 4 |
| 1.2 Planning Summary..... | 4 |
| Resources..... | 4 |
| Risk Analysis..... | 7 |
| Contribution of the Priorities to the Strategic Outcome..... | 9 |
| Section 2: Analysis of Program Activities | 12 |
| 2.1 Strategic Outcome..... | 12 |
| 2.2 Program Activities | 12 |
| 2.3 Internal Services – Program Activity..... | 16 |
| Section 3: Supplementary Information | 18 |
| 3.1 Supplementary Table | 18 |
| 3.2 Contacting the TSB..... | 18 |

Chair's Message

Canadians expect – even demand – a safe and sound transportation system on our waterways, along our pipelines and railways and in our skies. When the system fails and there is an accident, there is a clear public expectation that independent and skilled investigators will shine a light on all of the facts, will determine what risks there are in the system and will call for safety deficiencies to be addressed. The one and only priority for the Transportation Safety Board of Canada (TSB) is to meet these public expectations.

And I know we are largely successful. At industry and accident investigation conferences in Canada and around the world, I receive overwhelming positive feedback on the solid reputation and respect enjoyed by the TSB. Thanks to the expertise, professionalism and dedication of our investigators, we will continue to advance transportation safety, one investigation at a time.

I also know that there is always room for improvement and Canadians will be the beneficiaries of this improvement. This year, the Board will focus more strongly on increasing the visibility of crucial TSB recommendations and on convincing industry and government that they should address the safety deficiencies we find in our investigations. We will do this by improving our safety communications and ensuring our safety messages are better understood by those who can bring about changes necessary to make transportation safer.

As a learning organization, the TSB constantly seeks to improve its management practices. To this end, we will invest in a number of key projects and initiatives to support priorities in information management and information technology infrastructure, workforce retention and renewal and financial management. These investments will enhance our ability to focus on achieving our mandate with the greatest efficiency.

Through continuous efforts to improve business practices and resource management, the TSB will remain effective and efficient in delivering its mandate—to advance transportation safety.

Section 1: Overview

1.1 Summary Information

Raison d'être and Responsibilities

The Transportation Safety Board of Canada (TSB) is an independent agency created in 1990 by an Act of Parliament (*Canadian Transportation Accident Investigation and Safety Board Act*). It operates at arm's length from other government departments and agencies to ensure that there are no real or perceived conflicts of interest. The TSB's only objective is to advance transportation safety. This mandate is fulfilled by conducting independent investigations into transportation occurrences. The purpose is to identify the causes and contributing factors of the occurrences and the safety deficiencies evidenced by an occurrence. The TSB then makes recommendations to improve safety and reduce or eliminate risks to people, property and the environment.

The jurisdiction of the TSB includes all aviation, marine, rail and pipeline transportation occurrences¹ in or over Canada that fall under federal jurisdiction. The TSB may also represent Canadian interests in foreign investigations of transportation accidents involving Canadian registered, licensed or manufactured aircraft, ships or railway rolling stock. In addition, the TSB carries out some of Canada's obligations related to transportation safety at the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO).

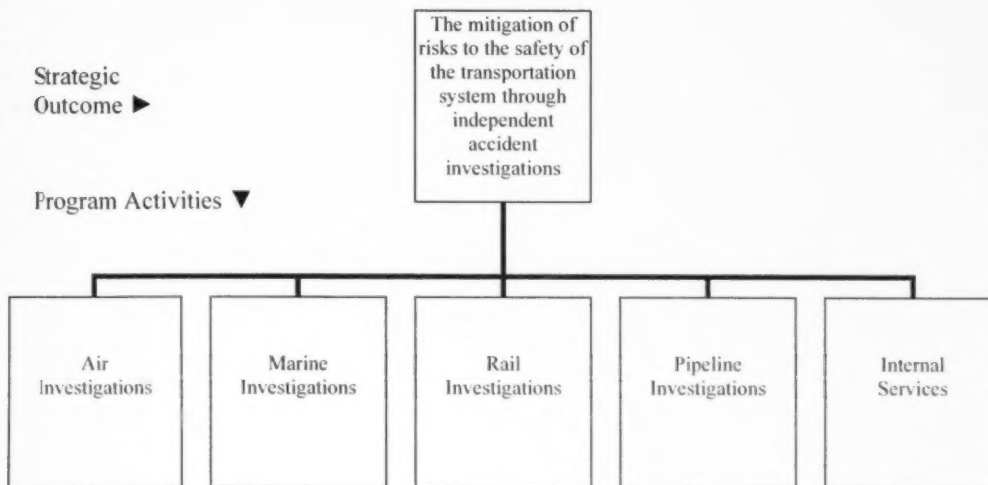
The TSB is primarily funded by Parliament through an operating expenditures vote and, as a departmental corporation, it has authority to spend revenues received during the year.

For more details on the link between the TSB and the other federal organizations or the investigation process, visit the TSB website at <http://www.tsb-bst.gc.ca/eng/index.asp>.

¹ A transportation occurrence is any accident or incident associated with the operation of an aircraft, ship, railway rolling stock or pipeline. It also includes any hazard that could, in the Board's judgement, induce an accident or incident if left unattended.

Strategic Outcome and Program Activity Architecture

The chart below illustrates the framework of program activities that contribute to progress toward the TSB strategic outcome.



1.2 Planning Summary

Resources

The two tables below show information on planned utilization of financial and human resources over the coming three-year period.

Financial Resources (\$ thousands)

| 2009-2010 | 2010-2011 | 2011-2012 |
|-----------|-----------|-----------|
| 28,944 | 28,943 | 28,943 |

Human Resources (FTEs^(*))

| 2009-2010 | 2010-2011 | 2011-2012 |
|-----------|-----------|-----------|
| 235 | 235 | 235 |

^(*) full-time equivalents

The following table shows the contribution of the departmental strategic outcome to the whole-of-government results. It also lists the performance indicators and targets for the TSB strategic outcome. Finally, it provides the results expected of the five program activities as well as the spending planned for each of them over the next three years. The TSB's baseline funding, as shown in the Main Estimates, is approximately 29 million dollars again this year. It is expected to remain stable over the next three fiscal years.

| | | | | |
|---|--|---|-----------|-----------|
| Link to the Government of Canada Outcome: Safe and secure communities (http://www.tbs-sct.gc.ca/ppg-cpr/framework-cadre-eng.aspx?Rt=1037) | | | | |
| TSB Strategic Outcome: The mitigation of risks to the safety of the transportation system through independent accident investigations | | | | |
| Performance Indicators⁽¹⁾ | | Targets (to be determined) | | |
| <ul style="list-style-type: none">Number of transportation occurrencesSpecific transportation accident rates⁽²⁾ | | | | |
| Expected results of each of the four key program activities: Increased productivity while conducting investigations and increased effectiveness of safety communications | | | | |
| Program Activities⁽³⁾ | Forecast Spending⁽⁴⁾ (\$ thousands) | Planned Spending⁽⁴⁾ (\$ thousands) | | |
| | 2008-2009 | 2009-2010 | 2010-2011 | 2011-2012 |
| Air Investigations | 14,168 | 12,779 | 12,779 | 12,779 |
| Marine Investigations | 5,667 | 5,112 | 5,112 | 5,112 |
| Rail Investigations | 5,409 | 4,879 | 4,879 | 4,879 |
| Pipeline Investigations | 515 | 464 | 464 | 464 |
| Internal Services | 6,331 | 5,710 | 5,708 | 5,708 |
| Total Departmental Spending | 32,090 | 28,944 | 28,943 | 28,943 |

(1) These are on an indication basis because the development of the TSB performance management framework is not yet completed.

(2) These rates provide data regarding the following occurrences: accidents involving Canadian-flag vessels with a gross tonnage of 15 or more per 1,000 movements, accidents occurring on a main track or spur per million main-track train-miles and Canadian-registered aircraft accidents per 100,000 hours.

(3) For a description of program activities, access the Main Estimates online at <http://www.tbs-sct.gc.ca/pre-est/estime.asp>.

(4) For a detailed description of these expenses, refer to the paragraph after the Expenditure Profile in this document.

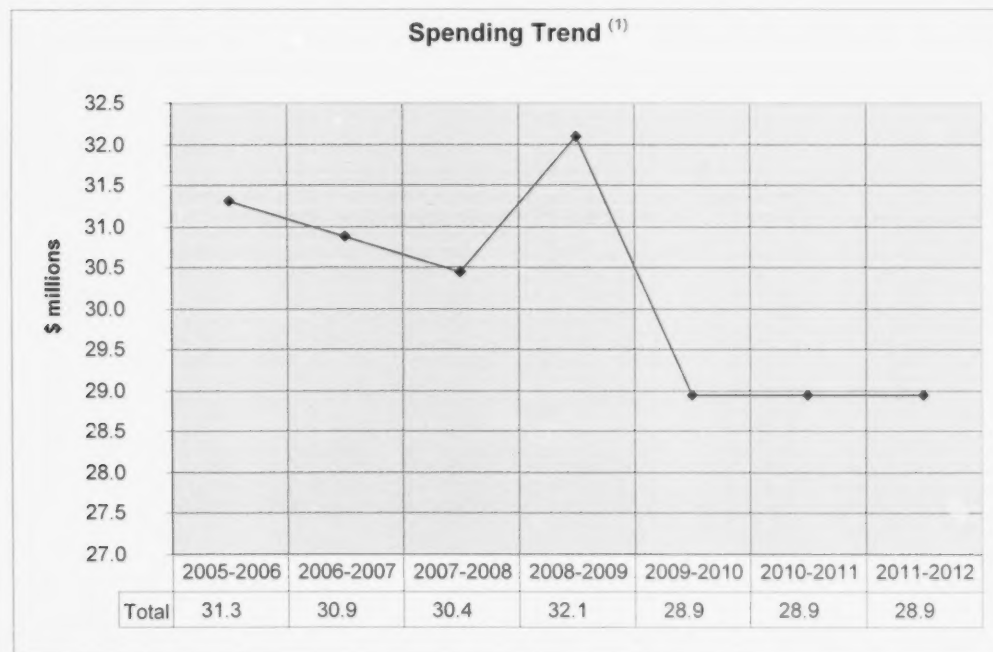
The following table explains the way Parliament voted resources to the TSB and in essence replicates the summary table in the Main Estimates.

Voted and Statutory Items

| (\$ thousands) | | | |
|----------------|--|-----------------------------|-----------------------------|
| Vote | Vote Wording | 2009-2010 Main Estimates | 2008-2009 Main Estimates |
| | Canadian Transportation Accident Investigation and Safety Board | | |
| 10 | Program Expenditures | 25,635 | 25,589 |
| (S) | Contributions to employee benefit plans | 3,309 | 3,394 |
| | Total | 28,944 | 28,983 |

The figure below illustrates TSB's spending trend from 2005-2006 to 2011-2012.

Expenditure Profile



⁽¹⁾ Costs of services received without charge are not included in the total spending.

For the 2005-2006 to 2008-2009 fiscal years, the total spending includes all Parliamentary appropriations and revenue sources: Main Estimates, Supplementary Estimates, transfers from Treasury Board Votes 10, 15 and 23 and spendable revenues.

It also includes carry forward adjustments. In addition, for the 2005-2006 and 2006-2007 periods, it includes the supplementary funds allocated by the Treasury Board for the investigation of major occurrences.

For the 2009-2010 to 2011-2012 periods, the total spending corresponds only to the Main Estimates planned spending because Treasury Board adjustments and carry forward are unknown. In real terms, this baseline funding has almost remained the same since 2006-2007.

Risk Analysis

The TSB operates within the context of Canada's very large, complex, dynamic and ever-changing transportation system. The following are the key external and internal factors that could have an impact on the organization's operations and management and the risks they represent.

From an External Point of View

Slowdown of the Global Economy and Impact on TSB Activities

The deterioration of the global economy since last fall has started to have an impact on the transportation sector.

According to Statistics Canada, while the number of Canadians travelling abroad and the number of overseas visitors to Canada continued to rise in the second quarter of 2008,² the airline industry suffered losses, primarily due to soaring fuel prices.³ Furthermore, despite growth in Canadian aircraft exports up until last October, China recently announced that it would have to put off buying any new aircraft from Canada as a result of the unfavourable global economic climate.⁴

Between September 2007 and 2008, rail carriers' intermodal shipments declined because of reductions in containerized freight shipments, and non-intermodal shipments hit lows not seen since 2004. Only rail freight traffic coming from the United States continued to make headway.⁵

According to a recent United Nations conference, an increase in world marine tonnage has come at a time when demand is waning. In addition, the World Trade Organization notes that the credit crisis has paralyzed the international maritime traffic. For now, the

² Statistics Canada, "Characteristics of International Travellers," *The Daily*, 27 November 2008.

³ Statistics Canada, *Canadian Economic Observer*, October 2008, Catalogue No. 11-010-XIB, Vol. 21, No. 10.

⁴ "C-Series de Bombardier," *La Presse Affaires*, 28 November 2008.

⁵ Statistics Canada, *Monthly Railway Carloadings*, September 2008 (<http://www.statcan.gc.ca/pub/52-001-x/52-001-x2008009-eng.htm>).

Port of Montréal seems to be relatively unscathed by the crisis. However, the Port of Vancouver, by mid-year, had already seen a 5% drop in the total volume of cargo handled compared with the previous year.⁶

It is too early to predict what kind of adjustments leaders from the different transportation sectors will make to their services and infrastructures to overcome this challenge. The TSB is monitoring the situation closely and is analyzing the occurrences reported for any trends that may increase safety risks within the transportation network.

Government Approach to Managing Departments and Agencies

The Government is taking steps to implement measures aimed at rationalizing its operations. Among the initiatives that may affect the TSB are the ongoing strategic reviews of departmental spending, the launch of a review of departmental assets and appropriations, and the agencies' obligations to rigorously manage spending in certain sectors. In early 2009, the Auditor General of Canada will release its latest report to Parliament, part of which will be dedicated to the governance of small federal entities. The recommendations contained in this report may also have downstream repercussions on TSB's operations and resources.

From an Internal Point of View

Repercussions of Organizational Changes

Over the last fiscal year, the TSB completed various projects associated with the review of its A-base budget. The actions stemming from these projects have helped tighten the Department's top-level organizational structure, realign its governance committees and ensure stringent follow-up on the organization's product quality and productivity. This year, a new Multi-Modal Training and Standards Division will be established, and further changes may be made to the regional structure of the Air Investigations Branch. In addition, modifications will be made with a view to improving management of our information technology infrastructure, financial management processes, and procedures for reports and other documents. To this end, undergoing numerous internal changes in a time of rationalized government spending may affect not only the morale and productivity of TSB employees, but also the ability to manage these changes. We must therefore ensure that every initiative includes an appropriate change-management framework to minimize any negative repercussions.

⁶ "Transport maritime, une industrie qui prend l'eau," *La Presse Affaires*, 29 November 2008.

Maintaining a Competent Workforce

The credibility and success of the TSB depend on its ability to develop and maintain a competent and diverse professional workforce to ensure operational continuity. The main challenges identified by management during planning for this fiscal year are described in the following paragraphs.

An increasing number of Public Service employees who provide internal services are eligible for retirement; meanwhile, the labour market is plagued by a thinning workforce over whom the different departments are competing fiercely. This means that the TSB is often required to take on contract workers to meet its needs. Not only is this approach costly, but it also creates instability, which can negatively affect operations and expose the organization to administrative errors.

Given the large number of experienced personnel retiring from the TSB, the Board must also ensure that the knowledge and the experience of these employees are not lost. This is particularly important within the TSB because numerous positions are the only one of their kind; in other words, only one person is responsible for a specific task or activity.

Finally, on a different note, the TSB does not have formal mechanisms in place allowing it to quickly obtain the additional human resources it may need to fulfil its mandate in extenuating circumstances (if the TSB were required to investigate more than one major occurrence at once, for example). This situation may impede the TSB's ability to respond.

That being said, the TSB does have a human resources strategy in place, as well as an action plan to help respond to the situations presented here as well as those defined as the priorities set by the Clerk of the Privy Council for the entire Public Service.

Contribution of the Priorities to the Strategic Outcome

After examining the TSB's environment and analyzing the risks and the challenges that are present, senior management has identified four key priorities for 2009-2010. The investments dedicated to the projects or initiatives identified for each of them will contribute to the achievement of the TSB strategic outcome over the next three years. These priorities and projects are summarized in the following table.

| Management Priorities | Type | Description |
|---|---------|--|
| Productivity and Effectiveness of Safety Communications | Ongoing | <p>Senior management believes that the quality and timeliness of TSB's products and services have helped establish and safeguard a good reputation among stakeholders, the public and next of kin. To maintain this reputation, the TSB must take the time to ensure that its products and services remain relevant for its target clientele and the general public.</p> <p>To this end, we will implement our departmental performance measurement framework and a new program evaluation framework to ensure that our products and services always achieve the desired results and represent good value for money. We will continue to follow up on the ideas that stemmed from the Chair's Challenge to help influence change within the transportation sector and increase the uptake of TSB recommendations. We will undertake a process to optimize the use of our website and networking technology, so as to share information and communicate more effectively with key partners and stakeholders, as well as with the public.</p> <p>In addition, program leads will continue to implement various measures to improve efficiency of safety recommendations and to achieve the productivity performance objectives assigned to them.</p> |
| Information Technology Infrastructure and Information Management | Ongoing | <p>We will finalize the assessment of the different options aimed at minimizing the amount spent on managing our information technology infrastructure and implement in stages a plan to reduce the number of its components.</p> <p>We will continue to invest in enhancing our applications infrastructure and will start progressively to develop and implement a full electronic records management system.</p> <p>Finally, we will complete the review of all existing electronic forms, and old forms will be converted to a current standardized platform.</p> |

| Management Priorities | Type | Description |
|--|---------|--|
| | | We will also undertake an assessment of our business processes to identify opportunities for the introduction, in the next few years, of electronic work flows and electronic business processes for the processing of transactions in the human resources and finance sectors. |
| Workforce Renewal and Retention | Ongoing | Senior management has identified the following departmental human resources initiatives as priorities for this year: the implementation of a new Multi-Modal Training and Standards Division and, if necessary, a new organizational structure for the Air Investigations Branch; setup of a program to ensure the transfer of essential knowledge; follow-up on results of the 2008 Public Service Employee Survey; and review of the standby system in response to comments made during the internal audit of overtime spending. |
| Financial Management | Ongoing | This year, the TSB will continue to improve its financial management processes with respect to budget allocation and revisions, salary forecasting and the establishment of the costs of large-scale investigations and projects stemming from the Business Plan. |

Section 2: Analysis of Program Activities

2.1 Strategic Outcome

The mitigation of risks to the safety of the transportation system through independent accident investigations.

2.2 Program Activities

The TSB has four key program activities, which are the safety investigations in the following four transportation systems:

- Air
- Marine
- Rail
- Pipeline

Within each program, personnel conduct independent safety investigations into transportation occurrences. They identify causes and contributing factors, assess risks to the system, formulate recommendations to improve safety, publish investigation reports, communicate safety information to stakeholders, undertake outreach activities with key change agents, as well as assess and follow up on responses to recommendations. These activities are carried out by highly qualified investigators who are experts in the transportation operational sectors. They also work closely with personnel who are responsible for executing specialized work in the following fields: engineering and technical, macro-analysis, human performance and publications and linguistics.

The following tables present the expected results, performance indicators and targets for each of the TSB's program activities. These data are only on an indication basis because the development of the TSB performance management framework is not yet completed.

Air Investigations

| Program Activity: Air Investigations | | | | | |
|--|------------------|---|------------------|--|------------------|
| Human Resources (FTEs) and Planned Spending (\$ thousands) | | | | | |
| 2009-2010 | | 2010-2011 | | 2011-2012 | |
| FTEs | Planned Spending | FTEs | Planned Spending | FTEs | Planned Spending |
| 97 | 12,779 | 97 | 12,779 | 97 | 12,779 |
| | | | | | |
| Program Activity Expected Results | | Performance Indicators | | Targets | |
| Increased productivity while conducting investigations | | <ul style="list-style-type: none"> Number of investigation reports published Mean time for completing investigation reports | | <ul style="list-style-type: none"> Publication of 60 investigation reports Mean time for completing investigation reports is less than 15 months | |
| Increased effectiveness of safety communications | | <ul style="list-style-type: none"> To be determined | | <ul style="list-style-type: none"> To be determined | |

Planning Highlights

To achieve the expected results, the Air Investigations Branch will have to maintain its investigation capabilities during a year that will see many staff and management retiring. This activity will include training for new staff, the transfer of corporate knowledge from employees before their departure from the TSB, and training for all on the recent changes in the aviation industry.

The Air Investigations Branch will strive to ensure that the number of ongoing investigations does not exceed the Branch's ability to produce investigation reports. It is currently able to produce approximately 60 investigation reports per year.

The Air Investigations Branch will also continue its efforts to establish and maintain professional external relationships, and will work collaboratively with its internal partners to make more effective use of TSB resources.

The Branch will continue to review its policies, procedures and manuals of investigations to ensure that they are up to date with the current international investigation standards.

Marine Investigations

| Program Activity: Marine Investigations | | | | | |
|--|------------------|---|------------------|--|------------------|
| Human Resources (FTEs) and Planned Spending (\$ thousands) | | | | | |
| 2009-2010 | | 2010-2011 | | 2011-2012 | |
| FTEs | Planned Spending | FTEs | Planned Spending | FTEs | Planned Spending |
| 39 | 5,112 | 39 | 5,112 | 39 | 5,112 |
| | | | | | |
| Program Activity Expected Results | | Performance Indicators | | Targets | |
| Improved productivity while conducting investigations | | <ul style="list-style-type: none"> Number of investigation reports published Mean time for completing investigation reports | | <ul style="list-style-type: none"> Publication of all reports on investigations started in 2008-2009 Mean time for completing investigation reports is less than 15 months | |
| Increased effectiveness of safety communications | | <ul style="list-style-type: none"> To be determined | | <ul style="list-style-type: none"> To be determined | |

Planning Highlights

To achieve the expected results, the Marine Investigations Branch will continue to carefully assess occurrences on which investigations will be undertaken to obtain maximum safety payoff while applying a project management approach to make effective use of the Branch resources. Furthermore, the implementation of TSB's investigation methodology will be reinforced in all steps of the investigation process for consistency and quality of investigations.

The Branch will also improve the effectiveness of Board safety recommendations by making sure that the staff consistently apply the recommendation development process, as identified by the Chair's Challenge initiative, through strategic communication with key stakeholders.

Finally, the Branch will continue to update and implement a strategic-focused approach to human resources planning to ensure the continuity and stability of service delivery. It will complete the staffing of vacant positions, as identified in its staffing plan. The newly hired staff will then be equipped with requisite skill sets and competency by training and coaching in key areas of investigation.

Rail Investigations

| Program Activity: Rail Investigations | | | | | |
|--|------------------|---|------------------|--|------------------|
| Human Resources (FTEs) and Planned Spending (\$ thousands) | | | | | |
| 2009-2010 | | 2010-2011 | | 2011-2012 | |
| FTEs | Planned Spending | FTEs | Planned Spending | FTEs | Planned Spending |
| 32 | 4,879 | 32 | 4,879 | 32 | 4,879 |
| | | | | | |
| Program Activity Expected Results | | Performance Indicators | | Targets | |
| Increased productivity while conducting investigations | | <ul style="list-style-type: none"> Number of investigation reports published Mean time for completing investigation reports | | <ul style="list-style-type: none"> Publication of 12 investigation reports Mean time for completing investigation reports is less than 18 months | |
| Increased effectiveness of safety communications | | <ul style="list-style-type: none"> To be determined | | <ul style="list-style-type: none"> To be determined | |

Planning Highlights

To achieve the expected results in the area of rail transportation, the Rail/Pipeline Investigations Branch will produce more concise investigation reports. In order to make effective use of limited resources, the Branch will be working more closely with the Operational Services.

Another priority will be to provide training resources to newly hired investigative staff, as well as refresher training to other staff in various areas, including investigation methodology, technical analysis, hazardous materials and communications.

In addition to the timely publication of investigation reports, the Rail/Pipeline Investigations Branch will improve safety communications by early communication of validated deficiencies.

Finally, the Branch will improve the database of railway occurrences to address concerns raised by the *Railway Safety Act* Review Panel. This will be achieved through working with the three major rail companies to develop the technological means to directly download occurrence reports into the statistical database.

Pipeline Investigations

| Program Activity: Pipeline Investigations | | | | | |
|--|------------------|---|------------------|---|------------------|
| Human Resources (FTEs) and Planned Spending (\$ thousands) | | | | | |
| 2009-2010 | | 2010-2011 | | 2011-2012 | |
| FTEs | Planned Spending | FTEs | Planned Spending | FTEs | Planned Spending |
| 3 | 464 | 3 | 464 | 3 | 464 |
| | | | | | |
| Program Activity Expected Results | | Performance Indicators | | Targets | |
| Increased productivity while conducting investigations | | <ul style="list-style-type: none"> Number of investigation reports published Mean time for completing investigation reports | | <ul style="list-style-type: none"> Publication of 1 investigation report Mean time for completing a class 3 report is 15 months, and 18 months for a class 2 report | |

2.3 Internal Services – Program Activity

The Internal Services program activity supports TSB's strategic outcome. It consists of the groups of activities and resources that are administered to support the needs of programs and other corporate obligations of the TSB. These groups are: management and oversight services; communications services; legal services; human resources services; financial and administrative services (including facilities, materiel and acquisition services); information management services; and information technology services.

| Financial Resources (\$ thousands) | | | Human Resources (FTE) | | |
|---------------------------------------|-----------|-----------|-----------------------|-----------|-----------|
| 2009-2010 | 2010-2011 | 2011-2012 | 2009-2010 | 2010-2011 | 2011-2012 |
| 5,710 | 5,708 | 5,708 | 64 | 64 | 64 |

Planning Highlights

In the coming year, the Executive Director will place an emphasis on solidifying the various organizational changes that have resulted from the recently completed A-base review exercise. Particular attention will be placed on evaluating how the new governance structure is functioning. A continued focus will be report timeliness and ensuring the operational capacity of the organization.

The priority of the Communications Division will be to increase the effectiveness of communications and outreach planning by adopting new initiatives that improve the visibility, access and understanding of TSB's safety messages, and in turn, help strengthen the uptake of the Board's recommendations. To this end, the Communications Division will continue to seek opportunities to connect with the public, the media and key change agents, to maximize the impact of the Board Outreach Program, and to generate growing awareness of the TSB by Canadians.

In addition to ensuring the ongoing provision of quality internal services to its clients, the Corporate Services Directorate will focus its efforts on three key priorities in 2009-2010. First, the Directorate will continue its efforts to implement its own human resources plan and to stabilize its workforce. Second, emphasis will be placed on the various projects that were assigned to Corporate Services (see the Management Priorities table at the end of Section 1.2) in order to improve the practices, controls or infrastructure in the areas of information technology, information management, human resources and finance. Finally, efforts will be made to review, update and streamline internal policies and procedures to reduce the administrative burden and improve efficiency of the organization.

Section 3: Supplementary Information

3.1 Supplementary Table

Additional information on the TSB internal audit project can be found on the Treasury Board Secretariat website at <http://tbs-sct.gc.ca/estsd-bddc/index-eng.asp>.

3.2 Contacting the TSB

Additional information about the Transportation Safety Board of Canada and its activities is available on the TSB website at <http://www.tsb-bst.gc.ca> or by contacting us at:

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